

Revised Appendix B

June 1, 2006

Atul M. Salhotra, Ph.D.

Sungmi Moon, Ph.D.

Risk Assessment & Management Group, Inc.

5433 Westheimer, Suite 725

Houston, TX 77030

Tel: 713-784-5151

E-mail: asalhotra@ramgp.com

DTLs and RBTLs – Chronology

- February 18, 2005 – Draft
- August 2005 – Changes approved by Workgroup on the April 28, 2005 meeting.
- August 24, 2005 – Changes based on the August 23, 2005 Workgroup meeting.
- September 13, 2005 – Summary of all suggested changes to DTLs and RBTLs posted.
- January 2006 – Changes as the result of all comments
- May 2006 – Final changes

*The most current version dated May 2006 is posted on
<http://www.dnr.mo.gov/env/hwp/mrbca/workgroup.htm>.*

Changes from January 2006 to May 2006

- Inclusion of petroleum-related chemicals
- Elimination of dermal contact with soil for volatile chemicals
- Rearrangement of chemicals
- Changes in soil-water partition coefficients (K_d) for metals

Changes were made to all the chemicals.

Changes in Soil-Water Partition Coefficient

- Soil-water partition coefficients (K_d) for metals are pH-dependent.
- Higher the K_d value, more of the chemical sorbs to soil and less is available for transport.
- For Mercury,

	<u>Feb. 2005</u>	<u>May 2006</u>
K_d (L/kg)	0.04	52
RBTL (mg/kg)*	0.00783	2.19

* RBTL for subsurface soil by resident and soil type 1